

WPI / Thomson

AN - 1992-102047 [13]  
AP - JP19900155756 19900614; [Previous Publ JP4045929 A 00000000]  
PR - JP19900155756 19900614  
TI - Poly:aniline fibre composite material for anion adsorbents - in which poly:aniline has specified ratio of quinone-di:imine and phenylene-di:amine structural units  
IW - POLY ANILINE FIBRE COMPOSITE MATERIAL ANION ADSORB SPECIFIED RATIO QUINONE DI IMINE PHENYLENE AMINE STRUCTURE UNIT  
PA - (NITL ) NITTO DENKO CORP  
PN - JP4045929 A 19920214 DW199213  
JP2999802B2 B2 20000117 DW200008  
IC - D06M15/61; B32B27/12; C08G73/00; C09D179/00; D01F8/04; D06M15/51  
ICAI- B32B27/12; C08G73/00; C09D179/00; D01F8/04; D06M15/61  
ICCI- B32B27/12; C08G73/00; C09D179/00; D01F8/04; D06M15/37  
AB - Material has a surface coated with a film made of a polyaniline. The polyaniline has repeat unit (I) (where m, n=molar fractions or quinonediimine structural units, and phenylene diamine structural units respectively in repeat units: m is between 0 and 1; n is between 0 and 1; and m+n=1. The polyaniline in its undoped state is soluble in an organic solvent, and has a limiting viscosity above 0.40 dl/g measured at 30 deg.C in N-methyl pyrrolidone.  
In the composite material, the film is made of an electroconductive polyaniline which is the aniline doped with a protonic acid (pref. polyvinyl sulphonic acid) with an acid dissociation constant pKa below 4.8.  
- USE/ADVANTAGE :  
For anion adsorbents, antistatic materials, pH indicators, etc. The release strength of the polyaniline film is high. The film when in its undoped state presents a clear blue colour and forms a green colour when it is doped.